

**DRAFT SCREENING SITE INVESTIGATION
FOR THE
STANDARD METAL ALLOY COMPANY SITE
813 PARRISH PLACE
PHILADELPHIA, PENNSYLVANIA
ECKEL SITE NUMBER 318**

Prepared for

U.S. Environmental Protection Agency Region 3
Hazardous Site Cleanup Division
1650 Arch Street
Philadelphia, PA 19103

Prepared by

Tetra Tech EM Inc.
7 Creek Parkway, Suite 700
Boothwyn, PA 19061

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1.0 INTRODUCTION

Under Remedial Action Contract (RAC) No. 68-S7-3002, Work Assignment No. 048-PAPA-03ZZ, U.S. Environmental Protection Agency (EPA) Region 3 tasked Tetra Tech, Inc. (Tt), to assist EPA Region 3 in the assessment of properties suspected to have been former lead smelter foundries. Tt subcontracted completion of this work assignment to Tetra Tech EM Inc. (Tetra Tech).

Former lead smelter sites nationwide were identified in an April 2001 article published in the American Journal of Public Health by Eckel, and others (Eckel study) (Reference [Ref.] 1). The majority of these lead smelters operated prior to 1964 and closed before the current environmental regulations were instituted. As part of the Eckel study, soil samples were collected from several of the identified former lead smelter properties. Results from the analysis of these soil samples indicated that concentrations of lead exceeded EPA's recommended screening level for lead in residential soils. The results of the Eckel study indicate that the air disposition of lead into soils from the former smelter operations may present an ongoing public health concern due to exposure of residential populations, especially children, located in the vicinity of these former lead smelters, to soils containing elevated concentrations of lead (Refs. 1, 2, and 3).

The Eckel study identified 77 properties that may have been formerly used as lead smelters within EPA Region 3 (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia). EPA Region 3 is currently investigating these 77 properties. The objective of EPA's investigation of these properties is to (1) determine the potential for lead-contaminated soil to be present at the former lead smelter site or nearby properties (2) identify any populations that may be at risk to exposure to this soil, and (3) determine if soil sampling is warranted at any of these sites or nearby properties.

The following activities were completed as part of the initial screening investigation of each of these former lead smelter sites: (1) verify the former lead smelter address listed in the Eckel

study through historical Sanborn fire insurance maps, tax parcel information, and/or contacting local agencies, (2) determine if the site is listed in EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database, (3) determine through census information and existing maps the number of schools, daycare centers or recreational parks that exist near the former lead smelter site, (4) determine the population residing within a 4-mile radius of the site, (5) conduct a windshield reconnaissance of the site and surrounding area to document the current land use, identify any exposed soil and verify the existence of any schools, daycare centers or parks in the immediate area, and (6) review all information acquired to determine if the collection and analysis of soil samples is warranted at the site or at any nearby property.

This report summarizes the findings of the tasks outlined above for the former lead smelter known as the Standard Metal Alloy Company site located at 813 Parrish Place, Philadelphia, Pennsylvania 19123. Each former smelter property was given a number in Eckel's study. The Eckel study number for this site is 318 (Ref. 1).

2.0 SITE LOCATION

The former Standard Metal Alloy Company facility was located at 813 Parrish Place, Philadelphia, Pennsylvania 19123. The geographic coordinates of the former Standard Metal Alloy Company facility are 39.966872 north latitude and 75.151157 west longitude on the Philadelphia, Pennsylvania-New Jersey Quadrangle, 7.5 minute series, United States Geological Survey topographic map (see Appendix A, Figure 1). The site is not currently listed in EPA's CERCLIS database (Ref. 4). An aerial photograph of the vicinity of the former lead smelter site has been included in Appendix A, Figure 2. This aerial photograph reveals the exposed soils and any identified areas of potential concern such as schools, daycare centers, or parks located within a half-mile radius of the site.

3.0 SITE OBSERVATIONS

On December 12, 2005, Tetra Tech completed a non-sampling windshield reconnaissance of the Standard Metal Alloy Company site and surrounding area. A photographic record of the current site conditions is included in Appendix B. Figure 3, shows the current layout of the site and surrounding area as observed during Tetra Tech's site reconnaissance. The following observations were recorded:

- The 800 block of Parish Place no longer exists. The East Poplar Playground currently exists in the location of the former smelter. The site is located in an area of Philadelphia occupied by both residential and commercial development.
- Numerous residential areas exist west of the site. East of the site is the Metropolitan Andrey Sheptytsky Education Center. Northeast of the site is the Philadelphia Police Forensic Science Center. An overhead railway cuts north/south across the possible location of the former site.
- Exposed soil exists on the East Poplar Playground, currently occupying the site. Surrounding the site, exposed soil exists at numerous residential, commercial, and public properties.
- The Delaware River, a tributary to the Delaware Bay, is located approximately one mile east of the site.
- No schools or daycare facilities were identified in the immediate vicinity of the site.

4.0 POTENTIAL TARGETS

Potential targets identified that may be exposed to lead-contaminated soils remaining in the vicinity of the former Standard Metal Alloy Company site include the nearby residential population and visitors to the East Poplar Playground. The population within a 4-mile radius of the site is summarized in the table below (Ref. 5).

Population within a Four-mile Radius of the Site

Distance Ring (miles)	Population (number of persons)
0.0 – 0.25	2,532
0.25 – 0.5	7,736
0.5 – 1.0	25,763
1.0- 2.0	157,128
2.0 - 3.0	243,146
3.0 – 4.0	235,580

Source: U.S. Department of Commerce. Landview V Environmental Mapping Software based on the Bureau of Census 2000 Population Data. December 7, 2005.

No schools or daycare facilities were identified in the immediate vicinity of the site. Eight schools have been identified within one-half mile of the site. Kearny School is approximately one-quarter mile southeast of the site. Cornman School is over one-quarter mile southwest of the site. Widener School, Jefferson School, Saint Agnes School, Assumption School, Paxson School, and Ludlow School are between one-quarter and one-half mile in various directions of the site. Edgar Allen Poe National Historical Site is located south of the site between one-quarter and one-half mile. Girard Park is located one-half mile northwest of the site.

5.0 FINDINGS AND RECOMMENDATIONS

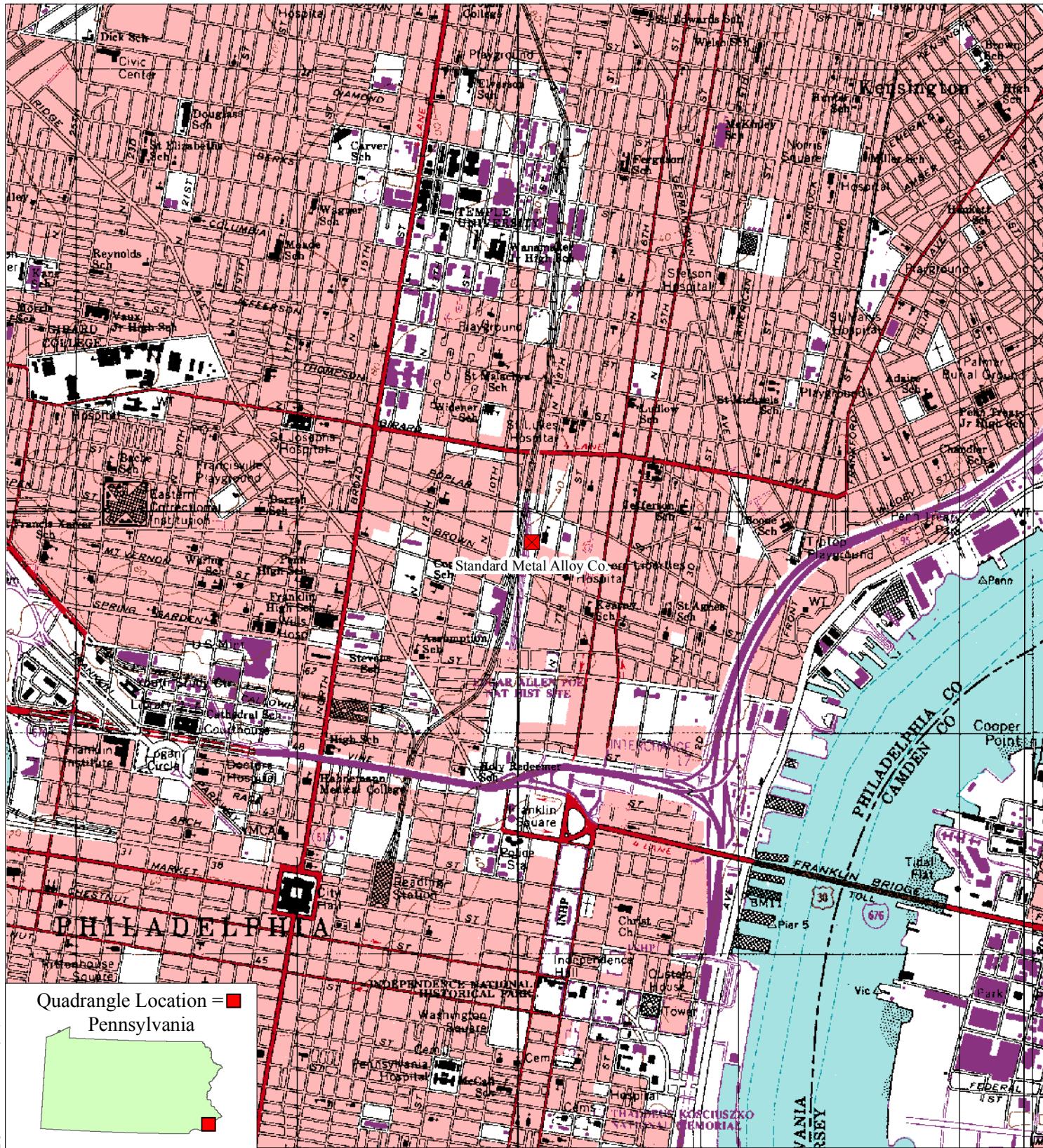
The site is located in an area of Philadelphia occupied by both residential and commercial areas. Exposed soils were observed on the site and in the nearby vicinity of the property formerly used as a lead smelter. To determine if there is a threat to visitors, including children, to the playground that currently occupies the site and the residential population located in the vicinity, it is recommended that soil samples be collected of exposed soils from East Poplar Playground, and from residential yards in the immediate vicinity and analyzed for lead levels.

REFERENCES

1. Eckel, W.P., Rabinowitz, M.B., Foster, G.D. American Journal of Public Health. "Discovering Unrecognized Lead-Smelting Sites by Historical Methods". April 2001.
2. Pennsylvania Department of Health. Suspected Former Lead Smelter Sites: A Potential Risk Factor for Childhood Lead Poisoning. August 2004.
3. U.S. Environmental Protection Agency (EPA). Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. OSWER Directive 9355.4-12. July 14, 1994.
4. U.S. EPA. Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) database. On-Line Address: <http://cfpub.epa.gov/supercpad/cursites/srchsites.cfm>
5. U.S. Census Bureau. State and County Quick Facts. Accessed On-Line on December 7, 2005. On-Line Address: quickfacts.census.gov/qfd/states/42.html.

Appendix A

Figures





Legend

- Approximate Site Location
- School
- 0.5-Mile Radius
- Parks

0 400 800
Feet
Scale in Feet

Standard Metal Alloy Company
813 Parrish Place
Philadelphia, Pennsylvania
Eckel Site No. 318

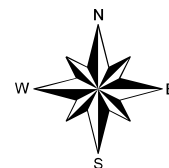


Figure 2
Aerial Photograph



Source: Modified from USGS, 2002, and ESRI, 2005



Appendix B
Photographic Documentation



Photographic Documentation

Site Name: Standard Metal Alloy Company - Eckel Number 318

Prepared by: Tetra Tech EM Inc.

Location: 813 Parrish Place, Philadelphia, Pennsylvania

Photographer: [REDACTED]

Photograph No. 1

Photograph Date:
September 7, 2005

Description: Residential housing located at 900 Parrish Street.



Photograph No. 2

Photograph Date:
September 7, 2005

Description: View of playground facing southwest from 8th Street where Parrish Street may have existed.





Photographic Documentation

Site Name: Standard Metal Alloy Company - Eckel Number 318

Prepared by: Tetra Tech EM Inc.

Location: 813 Parrish Place, Philadelphia, Pennsylvania

Photographer: [REDACTED]

Photograph No. 3

Photograph Date:
September 7, 2005

Description: The Metropolitan
Andrey Sheptytsky Education
Center located on the east side of
8th Street.

